

RGB to YUV as is known in the art. In response, Applicants respectfully submit that because such information is well known in the art, that Applicants should not be required to include any additional information related to such matters as Applicants submit that the Specification is fully enabling as written.

Applicants submit that Applicants claimed subject matter as claimed in claims 9-11 and 21-23 is fully supported by Applicants' Specification as would be interpreted by one of ordinary skill in the art. As such, Applicants submit that one of ordinary skill in the art who was in possession of Applicants disclosure, including the Claims, Specification and Drawings would therefore be in possession of the subject matter sought to be patented such that the person would not need to perform any additional undue experimentation. Therefore, Applicants submit that claims 9-11 and 21-23 are allowable as written.

To the extent that the Examiner maintains rejections of such claims, Applicants request that the subsequent that the Advisory Action include the those factors, reasons and evidence that lead the Examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation, or that the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims. (See MPEP 2164.04).

§ 102(e) Rejections (Blinn)

1-3, 5-6, 9, 12-14 and 17

Claims 1-3, 5-6, 9, 12-14 and 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Blinn, U.S. Patent 6,184,891. Applicants submit that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly, or inherently described, in a single reference. Furthermore, the identical invention must be shown in as

complete detail as contained in the claim.

Applicants submit that Blinn fails to disclose each and every element of Applicants' claimed subject matter and respectfully request the Examiner to withdraw the rejections.

Blinn

Blinn is directed to a fog simulation for partially transparent objects. Further, in the Summary Of The Invention section, it is further explained that Blinn discloses a fog method that is applied after computing the color of the pixel being fogged. The fogged pixel is then composited with another pixel at the same location. This method can be used in a layered graphics rendering pipeline where geometry in a graphics scene is rendered to separate image layers called sprites. A fogged image layer can be stored and re-used as long as the object rendered to the image layer moves in an (x,y) plane. If an object moves in the z direction, then it can be re-rendered independently and fogged using a new amount of fog representing the fog between the viewpoint and the object.

Here, the fog effect upon an object is dependent on the z depth that the object is located. It does not matter whether or not the object is located in front of or behind another object. The blending is performed such that whatever portion of that object is in the line of display, such portion is displayed and contains the correct fogging effect having been previously determined. This is why a fogged image can be stored and reused as long it remains in the same x-y plane, (i.e., the amount of fog between the point of sight and the object have not changed.). Therefore, fog is applied to each sprite layer independently. There is no need to apply the fog based on the location of other sprite layers as the only important factors are the depth of the current sprite being fogged, and the amount of fog between the point of sight and that sprite.

Therefore, since the existence of other sprite layers is irrelevant to the fogging of any particular sprite layer, there is no need for a fogging module to have any information regarding

any of the other sprite layers than the one it is currently performing on. Further, it does not matter which layer is fogged first as again, only the fog amounts and z distance of the sprite layer is needed for performing such fogging.

Independent Claim 1

Applicants note that claim 1 is for “a plurality of video graphics pipelines, wherein each of the plurality of video graphics pipelines is operable to process a corresponding image layer and wherein one of the plurality of video graphics pipelines processes a foremost image layer ...” (claim 1).

Blinn Does Not Disclose Multiple Pipelines

Applicants submit that neither Blinn generally, nor any of the Office Action’s cited references to Blinn, disclose, teach or suggest the use of multiple graphic pipelines. Blinn appears to always describe its pipeline in the singular, such as: “[i]n a layered graphics pipeline,” (col. 17, ln. 53), and “the fog model applies to a layered graphics pipeline,” (col. 18, lns. 17-18). Further, under the section labeled “Implementation of the Layered Graphics Rendering Pipeline,” Blinn states that a single pipeline, (i.e., not pipelines), “can independently render objects or parts of object in a scene to separate image layers called sprites,” (col. 13, lns. 60-62). Blinn continues: “the ... implementation includes a DSP 334, tiler buffer 336, shared memory 338, gsprite engine 340, composting buffer 342, and digital-to-analog converter (DAC) 334, (col. 14, lns. 8-10), “the ... system renders independent scene elements to sprites, combines the sprites into display images, and transfers the display images to a display device through the DAC 334,” (col. 14, lns. 13-18; Fig. 8). As such, Blinn discusses how a single pipeline is used to render multiple sprite layers, and nowhere discusses, teaches or suggests Applicants claimed subject matter of “a plurality of video graphics pipelines, wherein each of the plurality of video graphics

pipelines is operable to process a corresponding image layer and wherein one of the plurality of video graphics pipelines processes a foremost image layer ..." (claim 1).

Applicants address the Office Action's concerns as noted in Response to Arguments #1, where the Office Action suggests that Figs. 2 and 4 contain elements A and B that represent multiple pipelines. Applicants submit that what Blinn discloses in such Figs. is a demonstration of the problems with conventional fog simulations, (col. 4, lns. 51-53), while Fig. 3 is a graphical illustration of the logic for solving the problem associated with fogging partially transparent surfaces that overlap other fogged surfaces, (col. 6, lns. 31-35). Furthermore, Fig. 6 shows a scene with several overlapping objects and fog to illustrate how to compute fog for object layers, (col. 4, lns. 64-67). In addition, Applicants refer to a definition of "pipeline/pipelining," which states "A technique used in advanced microprocessors where the microprocessor begins executing a second instruction before the first has been completed. That is, several instructions are in the pipeline simultaneously, each at a different processing stage." "pipelining." *Webopedia Online Encyclopedia*. 2003. <http://www.webopedia.com> (16 Dec. 2003). Applicants submit that the operations on the separate pixels/regions A and B as shown in both Figs. 2 and 4 are those performed in a single pipeline. The fact that the two separate series of the transformation of the sets of A and B pixels in no way implies the use of multiple pipelines, as such processing is indicative of the type of processing performed on a single pipeline. Therefore, at least since Blinn does not otherwise disclose the use of a plurality of pipelines, either implicitly or explicitly, Applicants submit that Applicants claim 1 language is allowable as written.

Blinn Does Not Disclose A Blending Module Coupled To A Plurality Of Pipelines

Further, Applicants also submit that in addition to Blinn not disclosing, teaching or suggesting the use of multiple video graphics pipelines, Applicants submit that Blinn also does not disclose, teach or suggest "a *blending module operably coupled* to the plurality of video

graphics pipelines, wherein the blending module blends, in accordance with a blending convention, the corresponding image layers ...,” (claim 1). In support, Applicants submit that the blending shown in Fig. 8 is shown to occur within a single pipeline, the pipeline containing the DSP, Tiler, gsprite engine, composting buffer (containing the alpha buffer), and the DAC. As such, Applicants further submit that Blinn teaches away from Applicants subject matter by disclosing that its alpha blending is performed on the multiple sprite layers within a single pipeline.

Regarding the Office Actions concerns as reflected in Response to Arguments #2, where the Office Action suggests that Figs. 8, step 342 discloses a blending color module operably coupled to the plurality of video graphics pipelines, Applicants emphasize that reference number 342 represents a compositing buffer, (col. 14, lns. 9-10), and that the tiler 336 is described as the part of the rendering system that performs a blending function (col. 15, lns. 28-32), and that what is disclosed generally in Fig. 8 is the use of a single pipeline, not multiple pipelines, and therefore does not, and cannot, disclose Applicants’ claim 1 subject matter that includes “a *blending module operably coupled* to the plurality of video graphics pipelines, wherein the blending module blends, in accordance with a blending convention, the corresponding image layers ...,” (claim 1).

Further, regarding the Response to Arguments #3, where the Office Action suggests that Figs. 8, step 342 discloses an alpha buffer that is coupled to a plurality of graphics pipelines, and that claim 1 does not explicitly specify the specification of multi-graphics pipelines, Applicants refer the Examiner to the discussion above re: Fig. 8 and reference 342, and further note that Applicants’ claim 1 language, that includes: “...“a plurality of video graphics pipelines, wherein each of the plurality of video graphics pipelines is operable to process a corresponding image layer ...” (claim 1), contains therein “a plurality of video graphics pipelines” as a required

element. Again, Applicants emphasize the lack of disclosure in the Blinn reference that describes the use of multiple graphics pipelines in its disclosed process of fog simulation.

Therefore, and as discussed above, Applicants are not only unable to identify anywhere within Blinn any disclosure of the use of multiple pipelines, Applicants are also unable to identify anywhere within Blinn any suggestion of locating a blending mechanism outside of such a single graphics pipeline. As such, Applicants submit that Blinn's explicit discussion of locating the alpha blending mechanism within a single pipeline, teaches away from placing such a blending mechanism elsewhere.

Dependent Claim 2

Applicants submit that because claim 2 (dependent claim) depends from claim 1 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 3

Applicants submit that because claim 3 (dependent claim) depends from claim 2 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Regarding the Office Actions concerns as reflected in Response to Arguments #5, where the Office Action suggests that Blinn discloses Applicants' claim 3 subject matter as allegedly disclosed in col. 2, Ins. 14-25, Applicants emphasize that was is disclosed in Blinn is the use of a blend unit to determine, by rasterizing unsorted polygons into pixels with depth values, whether

an input pixel generated by a the rasterizer occludes a previously generated pixel at the same location, and as such, Blinn is absent any discussion of Applicants' claimed per pixel alpha value or global alpha value. Therefore, Applicants submit that Applicants' claim 3 is allowable as written.

Dependent Claim 5

Applicants submit that because claim 5 (dependent claim) depends from claim 1 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 6

Applicants submit that because claim 6 (dependent claim) depends from claim 1 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Independent Claim 12

First, Applicants direct the Examiner's attention to the arguments made above regarding claim 1. More specifically, to the arguments that the Office Action's cited references to Blinn are absent any disclosure of multiple graphic pipelines and are absent any disclosure of a blending module operably coupled to the plurality of video graphics pipelines.

In addition to the above, Applicants also submit that nowhere does Blinn disclose, teach or suggest "... a hardware cursor pipeline operable to process a cursor image ...," (claim 12). Rather, and as shown in Fig. 8, Blinn discloses a *single* pipeline that processes each sprite layer,

regardless of its content. (Emphasis added). Further, nowhere does Blinn disclose that a sprite layer contains any type cursor image at all, including a hardware cursor. In fact, Applicants submit that Blinn teaches away from the rendering of a cursor image in its pipeline as Blinn states that the “rendering system can render objects or parts of objects in a scene to separate image layers called sprites,” (col. 13, lns. 60-62), where Applicants submit that a cursor is generally not considered as part of a scene, but rather as a user graphics interface tool. Further, Applicants submit that a hardware cursor is *generally* blended with video graphics data, but generally not via an alpha blending technique. (Emphasis added).

Regarding the Office Actions concerns as reflected in Response to Arguments #9, where the Office Action suggests that Blinn discloses Applicants’ claim 12 subject matter as allegedly disclosed in Fig. 7, ref. 242, where a mouse 242 is shown connected to a personal computer, Applicants note that was is disclosed in Blinn is simply the use of such an input device and is absent any discussion, teaching or suggestion that a separate hardware cursor pipeline processes a cursor image, while a video graphics pipeline processes an image layer, and as such, Blinn is absent any discussion of Applicants’ claimed used of such multiple pipelines. Therefore, Applicants submit that Applicants’ claim 12 is allowable as written.

Dependent Claim 13

Applicants submit that because claim 13 (dependent claim) depends from claim 12 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 14

Applicants submit that because claim 14 (dependent claim) depends from claim 13 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 17

Applicants direct the Examiner to the arguments made regarding claim 6 and submit that claim 17 is allowable as written for the same, or similar reasons. In addition, Applicants also submit that because claim 17 (dependent claim) depends from claim 16 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

§ 102(e) Rejections (Snyder)

Claims 26-27 and 33 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Snyder et al.

Applicants submit that Snyder et al. fails to disclose each and every element of Applicants' claimed subject matter and respectfully request the Examiner to withdraw the rejections.

Snyder et al.

Snyder et al. is directed to a system for sorting 3D object geometry among image chunks for rendering in a layered graphics rendering system. As disclosed in the Summary Of The Invention, the invention uses pre-processing to prepare 3D graphics data.

Independent Claim 33

Applicants note that claim 33 includes "...determine an alpha blending mode from a plurality of modes, wherein each of the plurality of modes corresponds to at least one of utilizing a per pixel alpha blending value, utilizing a global alpha blending value, and utilizing a key alpha blending value; (b) obtain blending information based on the alpha blending mode; (c) generate a corresponding blending value based on the blending information; and (d) provide the corresponding blending value to a blending module ..." (claim 33).

Applicants submit that neither Snyder et al. generally, nor any of the Office Action's cited references thereto, disclose, teach or suggest, at least, Applicant's "determine an alpha blending mode from a plurality of modes, wherein each of the plurality of modes corresponds to at least one of utilizing a per pixel alpha blending value, utilizing a global alpha blending value, and utilizing a key alpha blending value," (claim 33 – Emphasis Added).

Applicants note that the cited to language in Snyder et al. of col. 14, lns. 1-9, discloses a scan line buffer that is used to accumulate alpha for each pixel, but is absent any discussion, teaching or suggestion of using at least either a global alpha blending value or a key alpha blending value. As such, Applicants submit that Snyder et al. does not, and cannot disclose teach or suggest Applicants' claimed subject matter.

Next, Applicants submit that the cited to language of col. 15, lns. 40-44 is directed to tiling which includes determining pixel values such as color and alpha for pixel locations specifically covered or partially covered by one or more polygons, and does not disclose, teach

or suggest Applicants' claimed subject matter: "... obtain blending information based on the alpha blending mode..." (claim 33). More specifically, and as discussed immediately above, Applicants submit that Snyder et al. is absent any disclosure of an alpha blending mode which is at least one of a per pixel alpha blending value, utilizing a global alpha blending value, and utilizing a key alpha blending value. As such, Applicants submit that Snyder et al. does not, and cannot disclose teach or suggest Applicants' claimed subject matter.

Applicants submit that at least because the blending information is based on the alpha blending mode, and as discussed immediately above, Snyder et al. does not disclose a blending mode as claimed by Applicants, that Snyder et al. does not, and cannot disclose teach or suggest Applicants' claimed subject matter including "... generate a corresponding blending value based on the blending information ...," and likewise, because the blending value is based on the blending information, and which in turn is dependent upon the non-disclosed blending information, that Applicants' claimed subject matter including "... provide the corresponding blending value to a blending module ..." is also not disclosed, taught or suggested by Snyder et al.

Dependent Claim 25

Applicants refer the Examiner to the arguments above regarding claim 33, and submit that because Snyder et al. neither discloses Applicants' alpha blending mode, nor the alpha blending mode being Applicants' global alpha blending value, that Snyder et al. does not, and cannot disclose Applicants' claimed subject matter.

Applicants also submit that because claim 25 (dependent claim) depends from claim 33 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 26

Applicants refer the Examiner to the arguments above regarding claim 33, and submit that because Snyder et al. neither discloses Applicants' alpha blending mode, nor the alpha blending mode being Applicants' per pixel alpha blending value, that Snyder et al. does not, and cannot disclose Applicants' claimed subject matter.

Applicants also submit that because claim 26 (dependent claim) depends from claim 33 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 27

Applicants refer the Examiner to the arguments above regarding claim 33, and submit that because Snyder et al. neither discloses Applicants' alpha blending mode, nor the alpha blending mode being Applicants' key alpha blending value, that Snyder et al. does not, and cannot disclose Applicants' claimed subject matter.

Applicants also submit that because claim 27 (dependent claim) depends from claim 33 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

§ 103(a) Rejections

Claims 4, *(9-11), 15, 16, 20, *(21-23) and 28-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blinn, an in further view of Snyder et al. (US Pat. No. 6,326,964).

Applicants respectfully request reconsideration and withdrawal of these rejections based on the following discussion.

Dependent Claim 4

Applicants acknowledge the Office Action's statement that Blinn does not disclose the AND/XOR blending.

Regarding the Office Actions concerns as reflected in Response to Arguments #11, where the Office Action appears to suggest, even after having made the above acknowledged statement, that Blinn discloses AND/XOR blending, Applicants submit that what is disclosed by the cited to language (col. 6, lns. 34-41) is simply an alpha as represented in a binary number between 0 and 255 which represents a pixel's translucency or opaqueness, and does not discuss, teach or suggest any AND/XOR blending, and therefore does not, and cannot, disclose Applicants' claim 33 subject matter that includes "...wherein the AND/XOR blending further comprises one of a plurality of pixel depths ...," (claim 4).

Applicants note that the teaching or suggestion to make the combination and the reasonable expectation of success must be both found in the prior art, and not based on applicant's disclosure. Further, the level of skill in the art cannot be relied upon to provide the suggestion to combine references. Applicants submit that the Office Action is improperly relying on the teachings of Applicants' disclosure for suggesting that it would be obvious to modify the prior art to achieve the results of Applicants' claimed subject matter.

Applicants also submit that because claim 4 (dependent claim) depends from claim 2 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

*Dependent Claims 9-11 and 21-23

Applicants note the Office Action statement in the Allowable Subject Matter section which stated that Claims 9-11 and 21-23 contain allowable subject matter. As such, Applicants submit that, in accordance with Applicants' comments associated therewith, that such claims are allowable as written. To the extent that the next Examiner maintains the earlier obviousness rejections, Applicants thereby include herein Applicants arguments from its prior Office Actions addressing the non-obviousness of claims 9-11 and 21-23.

Dependent Claim 15

Applicants acknowledge the Office Action's statement that Blinn does not disclose the AND/XOR blending.

Applicants direct the Examiner's attention to the arguments made in regard to claim 4 and submit that for same or similar reasons, that claim 15 is also allowable as written. Applicants also submit that because claim 15 (dependent claim) depends from claim 13 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 16

Applicants direct the Examiner's attention to the arguments above regarding claim 12 and specifically direct the Examiner to the language which states that Blinn does not disclose that a sprite layer contains any type cursor image, and thus there is no sprite layer to blend. Applicants also note that the Office Action does not suggest, nor have Applicants been able to identify, anywhere in Snyder et al. where there is disclosed any subsequent blending of a cursor image layer with an intermediate blended image. As such, since none of the cited references teach or

suggest where a blending circuit blends a plurality of images layers to produce an intermediate blending image, and subsequently blending the cursor image layer with the intermediate blended image in a predetermined blending order, the combination of any of the cited references cannot produce the Applicants' invention as claimed.

Regarding the Office Actions' statement in Response to Arguments #13, that the Applicants argued that Blinn did not disclose a sprite layer, Applicants submit that what Applicants argued, and continue to argues, is that "Blinn does not disclose that a sprite layer contains any type cursor image, and thus there is no sprite layer containing a cursor image to blend.

Applicants also submit that because claim 16 (dependent claim) depends from claim 12 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 20

Applicants acknowledge the Office Action's statement that Blinn does not disclose a first input of receiving the at least one image layer and a second input for receiving the cursor image layer.

Applicants submit that just because Snyder et al. discloses a cursor positioning device such as a mouse or joystick, that this does not mean that Snyder et al. discloses, teaches or suggests, whether considered alone or in combination with Blinn, Applicants' claimed subject matter, including "a first input for receiving the at least one image layer, a second input for receiving the cursor image layer, and blending module operable to alpha blend the at least one image layer and the cursor image layer to produce the output image. In support of this position

Applicants direct the Examiner's attention to the arguments made above regarding claim 16 addressing the fact that neither Blinn nor Snyder et al., disclose, teach or suggest a cursor image layer, let alone a blending module operable to alpha blend the at least one image layer and the cursor image layer to produce the output image, or for a second input for receiving the cursor image layer.

Regarding the Office Actions' statement in Response to Arguments #14, Applicants submit that the claim language focused on by the Applicants here is a "cursor image layer" rather than simply a "cursor image," and Applicants submit that the claim 20 subject matter including "...blending module operable to alpha blend the at least one image layer and the cursor image layer to produce the output image ..." is not disclosed, taught or suggested by either Blinn or the cited references in combination..

Applicants note that the teaching or suggestion to make the combination and the reasonable expectation of success must be both found in the prior art, and not based on applicant's disclosure. Further, the level of skill in the art cannot be relied upon to provide the suggestion to combine references. Applicants submit that the Office Action is improperly relying on the teachings of Applicants' disclosure for suggesting that it would be obvious to modify the prior art to achieve the results of Applicants' claimed subject matter.

In addition, Applicants submit that because claim 20 (dependent claim) depends from claim 12 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Independent Claim 28

Applicants direct the Examiner's attention to the arguments made in regard to claim 33 and submit that for same or similar reasons, that claim 28 is also allowable as written. More specifically, Applicants submit that neither Blinn nor Snyder et al. disclose, teach or suggest an alpha blending mode which is at least one of a per pixel alpha blending value, utilizing a global alpha blending value, and utilizing a key alpha blending value.

Dependent Claims 29-32

Applicants submit that because Claims 29-32 (dependent claims) depend from Claim 28 (parent claim), the dependent claims are allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claims are also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

§ 112 Rejections

Claims 7-8 and 18-19 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 7-8

Dependent Claims 7 and 18

The Office Action rejects the limitation "blending and alpha values" in claims 7 and 18. The Office Action states that Fig. 1 does not show the transparency, and this at odds with "alpha blending," which is defined as the combining a transparent source color with a translucent destination color.

Applicants respectfully submit that this rejection is improper and request its withdraw. Applicants submit that the scope of each of the claims is definite and that the claim as written is clear to a hypothetical person possessing the ordinary level of skill in the field. Applicants submit that the embodiment shown in Fig. 1, that is allegedly absent a representation showing specific alpha blending, does not render such claims indefinite, as it is the Application as a whole, not any particular figure, which provides the disclosure that enables the claims therein. Applicants further submit that the Figs. of an application need not illustrate all embodiments in order to claim all such embodiments. Applicants respectfully submit that given the disclosure as a whole, that the claims are clear to one of ordinary skill in the art.

Dependent Claims 8 and 19

The Office Action rejects the limitation “a first input for receiving the intermediate blended image; a second input for receiving the foremost image layer” in claims 8 and 19. The Office Action states that Fig. 1 does not show the transparency, and this at odds with “alpha blending,” which is defined as the combining a transparent source color with a translucent destination color.

Applicants respectfully submit that this rejection is improper and request its withdraw. Applicants submit that the scope of each of the claims is definite and that the claim as written is clear to a hypothetical person possessing the ordinary level of skill in the field. Applicants submit that simply because the claim does not indicate if a first or second input correspond to a series and/or parallel pipeline, does not render such claims indefinite. Applicants respectfully submit that given the disclosure as a whole, that the claims are clear to one of ordinary skill in the art.

Finally, to the extent that any of the 112 rejections are maintained, Applicants request that an explanation be included to further explain whether the rejection is based on indefiniteness or on the failure to claim what applicants regard as the invention. (See MPEP 2171).

CONCLUSION

For the foregoing reasons, withdrawal of the rejections and allowance of the claims is respectfully requested. If there are any questions or comments regarding this response, the Examiner is encouraged to contact the undersigned at 312-609-7500.

Respectfully submitted,

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